

Amendments to the Claims: This listing of claims will replace all prior versions, and listings, of claims in the application

Listing of Claims:

1. (Currently Amended) A stimulating catheter, comprising:

a flexible cylindrical tube defining an inner diameter, a proximal portion and a distal portion terminating in an open distal tip, said tube having a plurality of openings formed therethrough;

a dome-shaped conductive end cap closing said open distal tip of said tube; said end cap having ~~an a maximum~~ outer diameter ~~no not~~ greater than ~~an the~~ inner diameter of said tube, and

a flexible conductive member attached at one end to said conductive end cap and running the length of said tube.

2. (Original) The catheter of claim 1 wherein said tube has an inner diameter between 0.005 in. (0.127 mm) and 0.025 in. (0.635 mm).

3. (Original) The catheter of claim 1 wherein said tube has an outer diameter between 28 gauge and 16 gauge.

4. (Original) The catheter of claim 1 wherein said plurality of openings define a diffusion area.

5. (Original) The catheter of claim 4 wherein the length of said diffusion area is between 0.5 in. (1.27 cm) and 20 in. (50.8 cm).

6. (Original) The catheter of claim 1 having between 2 and 100 openings.

7. (Original) The catheter of claim 1 wherein said openings are offset between 0°-360° circumferentially from adjacent said openings.

8. (Original) The catheter of claim 1 wherein said openings are arranged into rows.

9. (Original) The catheter of claim 1 wherein said openings are spaced between 2 and 300 mm from adjacent said openings.

10. (Original) The catheter of claim 1 further including a window for visualizing flashback.

11. (Original) The catheter of claim 1 wherein said flexible cylindrical tube comprises sterilizable plastic.

12. (Original) The catheter of claim 11 wherein said sterilizable plastic is selected from the group consisting of polyurethanes, low density polyethylene, high density polyethylene, polypropylene, polystyrene, polycarbonate, polytetrafluoroethylene, tetrafluoroethylene, fluorinated ethylene propylene and polyamides.

13. (Original) The catheter of claim 11 wherein said sterilizable plastic comprises polyamide and copolymers thereof.

14. (Original) The catheter of claim 11 wherein said sterilizable plastic comprises polyurethane which further includes at least one siloxane.

15. (Original) The catheter of claim 1 wherein said flexible conductive member is made from a material selected from the group consisting of stainless steel, titanium, nickel-titanium and conductive plastic filament.

16. (Original) The catheter of claim 1 wherein the shape of said flexible conductive member is selected from the group consisting of coil, strip, ribbon, filament, braid or mesh.

17. (Original) The catheter of claim 16 wherein said coil is formed of a wire having a diameter of between 0.001 in (0.0254 mm) and 0.003 in (0.0762 mm) and having a pitch between 0.009 in (0.2286 mm) and 0.015 in (0.381 mm) between adjacent coils.

18.-59. (Cancelled)

60. (Previously Presented) The catheter of claim 1, wherein said conductive member is additionally attached to an inside diameter of said tube at said proximal portion so as to form an annular area between an outside diameter of said coil and said inside diameter

of said tube, said coil having adjacent turns spaced to enable fluid to leak into said annular area.

61. (Previously Presented) The catheter of claim 60 wherein said tube has an inner diameter between 0.005 in. (0.127 mm) and 0.025 in. (0.635 mm).

62. (Previously Presented) The catheter of claim 60 wherein said tube has an outer diameter between 28 gauge and 16 gauge.

63. (Previously Presented) The catheter of claim 60 wherein said plurality of openings define a diffusion area.

64. (Previously Presented) The catheter of claim 63 wherein the length of said diffusion area is between 0.5 in. (1.27 cm) and 20 in. (50.8 cm).

65. (Previously Presented) The catheter of claim 60 having between 2 and 100 openings.

66. (Previously Presented) The catheter of claim 60 wherein said openings are offset between 0°-360° circumferentially from adjacent said openings.

67. (Previously Presented) The catheter of claim 60 wherein said openings are arranged into rows.

68. (Previously Presented) The catheter of claim 60 wherein said openings are spaced between 2 and 300 mm from adjacent said openings.

69. (Previously Presented) The catheter of claim 60 further including a window for visualizing flashback.

70. (Previously Presented) The catheter of claim 60 wherein said flexible cylindrical tube comprises sterilizable plastic.

71. (Previously Presented) The catheter of claim 60 wherein said sterilizable plastic is selected from the group consisting of polyurethanes, low density polyethylene, high density polyethylene, polypropylene, polystyrene, polycarbonate, polytetrafluoroethylene, tetrafluoroethylene, fluorinated ethylene propylene and polyamides.

72. (Previously Presented) The catheter of claim 60 wherein said sterilizable plastic comprises polyamide and copolymers thereof.

73. (Previously Presented) The catheter of claim 60 wherein said sterilizable plastic comprises polyurethane which further includes at least one siloxane.

74. (Previously Presented) The catheter of claim 60 wherein said coil is made from a material selected from the group consisting of stainless steel, titanium, nickel-titanium and conductive plastic filament.

75. (Previously Presented) The catheter of claim 60 wherein said coil is formed of a wire having a diameter between 0.001 in (0.0254 mm) and 0.003 in (0.0762 mm) and having a pitch between 0.009 in (0.2286 mm) and 0.015 in (0.381 mm) between adjacent coils.